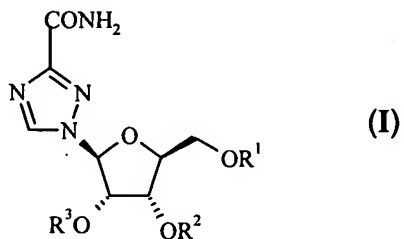


## ABSTRACT

The present invention relates to nucleosides of formula **I** wherein  $R^1$ ,  $R^2$  and  $R^3$  are as defined herein  
5 that modulate Th1 and Th2 immune activity, methods of using compounds according to formula **I**, alone  
or in combination therapy, for treatment of a bacterial or a viral infection, a parasite infestation, a cancer  
or tumor or an autoimmune disease and compositions containing prodrugs of the nucleoside of formula  
**Ia**.



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